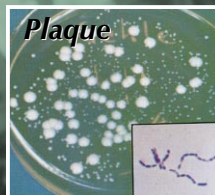


Combat Dental Research Program

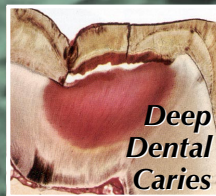
MISSION: To provide world-class, unique, and militarily relevant research for the prevention, treatment, and rehabilitation of craniofacial trauma and infectious dental diseases. We formulate products that maximize the dental combat readiness and preparedness of the Objective Force Warrior, minimize casualties due to dental infectious diseases, protect the head and neck from trauma, preserve tissue in the event of trauma, facilitate hard and soft tissue wound healing, and minimize the logistic footprint of dental support in the deployed environment.



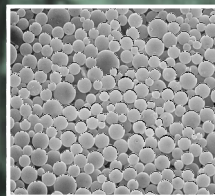
Gingivitis



Plaque



Deep Dental Caries



Bioengineering Program

- Conducts R&D of products and equipment to reduce the size, weight, and electrical requirements of present dental sets, kits, and outfits

Microbiology Program

- Develops new methods to thwart or control destructive infections in soft tissue and bone, to allay oral microbial disease processes, and to enhance wound healing in the maxillofacial area of the traumatized individual

Chemistry Program

- Develops drugs, devices, methodologies, and materials that enhance combat dental services and improve the treatment of maxillofacial trauma

Dental Materials Program

- Conducts R&D to develop new dental biomaterials, devices, and technologies that will enhance operational preparedness and far-forward dental support

The Dental Threat

Dental Emergencies:

Deployment	Rate/100 Troops/Yr
Vietnam (2 studies)	16.3
Field Exercises (4 studies)	18.5
Desert Shield/Storm (1 study)	14.9
Somalia (1 study)	23.2
3rd ACR in Bosnia FY2000	15.6

Even with improved predeployment care, it is predicted that 13.7% of military personnel will have dental emergencies during deployments.

Oral & Maxillofacial Trauma:

- Vietnam:
 - ◆ 1.06/100 soldiers/year ('67-'68)
 - ◆ 10%-15% of trauma admissions
 - ◆ 68.4% battle injury/31.6% non-battle injury
 - ◆ 84.4% admitted/15.8% outpatient care
 - ◆ 58% treated by the Dental Corps (DC), 35% treated by DC/Medical Corps teams

Combat Dental Research will provide technologies to...

- further decrease the incidence and impact of dental emergencies
- reduce incidence of trauma
- stabilize trauma patients prior to evacuation
- decrease morbidity and mortality

